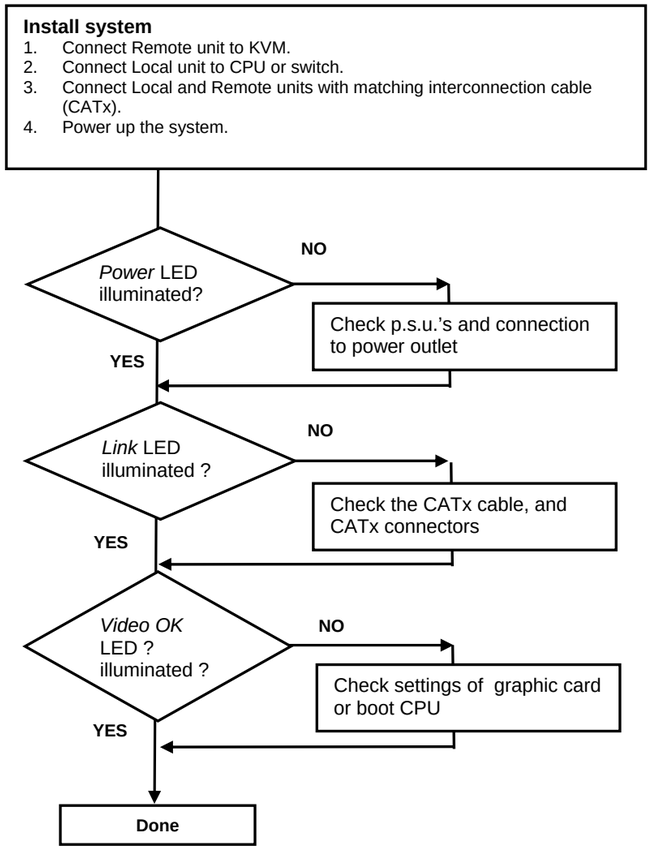
1 Quick Setup

This section briefly describes how to install your KVM extender system. Unless you are an experienced user, we recommend that you follow the full procedures described in the rest of this manual. You can download the manual on: http://www.ihse.de/pdf/b461-xc_e.pdf.


Install system
1. Connect Remote unit to KVM.
2. Connect Local unit to CPU or switch.
3. Connect Local and Remote units with matching interconnection cable (CATx).
4. Power up the system.
Power LED illuminated?
NO
Check p.s.u.'s and connection to power outlet
YES
Link LED illuminated ?
NO
Check the CATx cable, and CATx connectors
YES
Video OK LED ? illuminated ?
NO
Check settings of graphic card or boot CPU
YES
Done

2 Installation

For first-time users, we recommend that you carry out a test placement, confined to a single room, before commencing full installation. This will allow you to identify and solve any cabling problems, and experiment with the KVM extender system more conveniently.

2.1 Package Contents

You should receive the following items in your extender package (all types):

- DVXi/ET KVM-Extender- pair (Local Unit + Remote Unit)
- 2x 5V DC universal power supply for the DVXi/ET - Extender
- 2x German type power cord
- User manual (Quick Setup)

K461-1W and K461-2W (additionally):

- KVM CPU cable set (1.8m) with one side: PS/2 (6-pin mini-DIN male) keyboard and mouse connector and DVI-D video (DVI-D dual link male) connector – other side: DVI-D video (DVI-D dual link male) connector
- PS2-Keyboard-/ Mouse adapter to connect K/M to the Local Unit (keyboard can be plugged in directly, without using an adapter)

K461-1U and K461-2U (additionally):

- DVI-D (1,8m) video cable (DVI-D dual link male-to-male)
- USB (1,8m) cable (USB type A to type B)

K461-2W and K461-2U (additionally):

- DVI-D (1,8m) video cable (DVI-D dual link male-to-male)

If anything is missing, please contact Technical Support

DVXI/ET-XC DVI- KVM-EXTENDER

2.2 System Setup

To install your DVXi/ET – Extender system:

1. Switch off all devices.
2. Connect your keyboard, monitor(s) and mouse to the Remote unit (depending on device type). Please ensure, to not swap Mouse- and Keyboard connector. The Keyboard connector is purple and the Mouse connector is green.
3. Using the supplied CPU KVM cable(s), connect the keyboard, monitor(s) and mouse connectors on the computer (or KVM switch). Please ensure, to not swap Mouse- and Keyboard connector. The Keyboard connector is purple and the Mouse connector is green.
4. Connect the interconnect cable to the INTERCONNECT socket(s)
5. Connect the 5V power supply to power the unit.

   Only use the power supply originally supplied with this equipment or a manufacturer-approved replacement.

6. For a dual access system, connect the keyboard, mouse and monitor for the Local console to the appropriate ports on the Local unit. The ports may also be used to feed into a KVM switch. To the local (PS2-) Keyboard-/ Mouse port you can attach a Keyboard directly or Mouse/ Keyboard together, using the delivered adapter.
7. Power up the system.

2.3 Interconnection Cable Requirements

To connect the Local and Remote units you will need:

- **DVI, PS2-Keyboard, PS2-Mouse:** Connect the supplied KVM CPU cable set to your CPU (KVM.- Switch, etc.). Please ensure that the connection is tension-free! Devices K461-1W + K461-2W
- **DVI, USB-Keyboard, USB-Mouse:** Connect the supplied DVI-D cable (DVI-D to DVI-D) and the USB-cable (USB-A to USB-B) to your CPU. Please ensure that the connection is tension-free! Devices K461-1U + K461-2U
- **DVI:** Connect the supplied DVI CPU cable set to your CPU (KVM.- Switch, etc.). Please ensure that the connection is tension-free! Devices K461-2W + K461-2U
- **CATx Cable:** Recommended cable: S/UTP (Cat5) according EIA/TIA 56A, TSB 36 or Digital STP 17-03170. Four pairs AWG 24. connection according EIA/TIA 568A (10BaseT). Use of cables from a higher category (Cat5e, Cat6, Cat7) is possible.

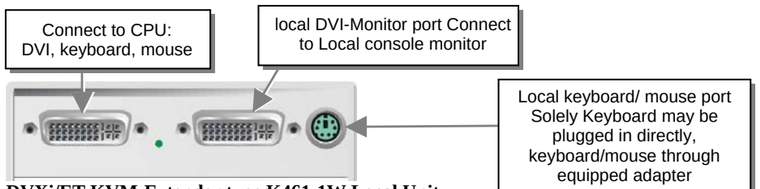
  The use of unshielded CATx Cable is possible, because of the higher electromagnetic noise/sensitivity the device class may not be reached.
  The use of flexible Cables (Patch cable) Type AWG26/8 is possible. Because of the higher loss of the stranded cables, the maximum distance is reduced to app. half the value of solid cables.

  - A point to point connection is required. Having one or more patch panels in the line is possible and allowed. Not allowed is a connection from the CATx link interface (RJ45) to any other products, especially telecommunications or network equipment.

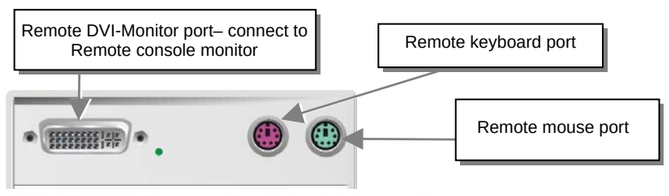
- **Power Supply**
  Connect the supplied 5V/DC power supplies to the ***Plug*** terminal on the rear of both Local and Remote units.

3 Device view (depending on device type)

Please see the manual for audio device views.


Connect to CPU: DVI, keyboard, mouse
local DVI-Monitor port Connect to Local console monitor
Local keyboard/ mouse port Solely Keyboard may be plugged in directly, keyboard/mouse through equipped adapter

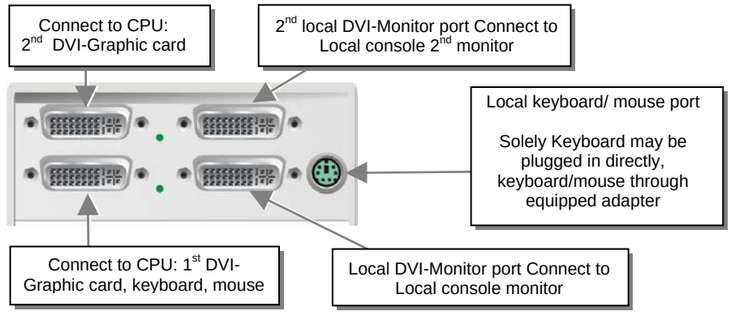
DVXi/ET KVM-Extender type K461-1W Local Unit



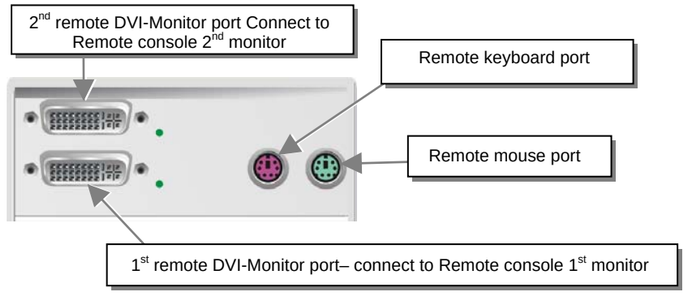
DVXi/ET KVM-Extender Typ K461-1W Remote Unit

manual : http://www.ihse.de/pdf/b461-xc_e.pdf

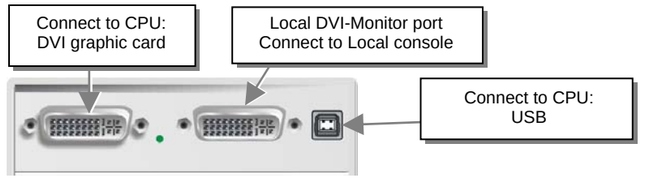
DVXI/ET-XC DVI- KVM-EXTENDER


Connect to CPU: 2nd DVI-Graphic card
2nd local DVI-Monitor port Connect to Local console 2nd monitor
Local keyboard/ mouse port
Solely Keyboard may be plugged in directly, keyboard/mouse through equipped adapter
Connect to CPU: 1st DVI-Graphic card, keyboard, mouse
Local DVI-Monitor port Connect to Local console monitor

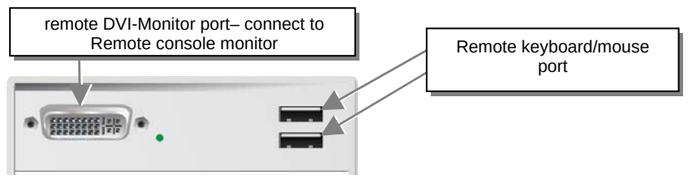
DVXi/ET KVM-Extender Type K461-2W Local Unit


2nd remote DVI-Monitor port Connect to Remote console 2nd monitor
Remote keyboard port
Remote mouse port
1st remote DVI-Monitor port– connect to Remote console 1st monitor

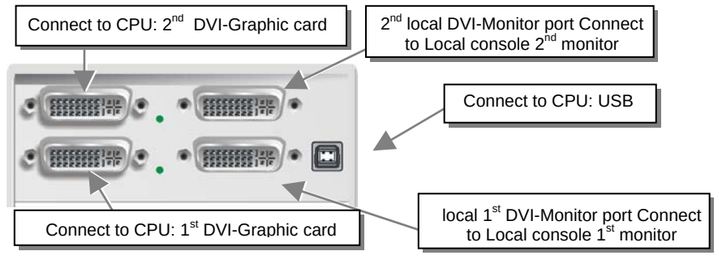
DVXi/ET KVM-Extender Type K461-2W Remote Unit



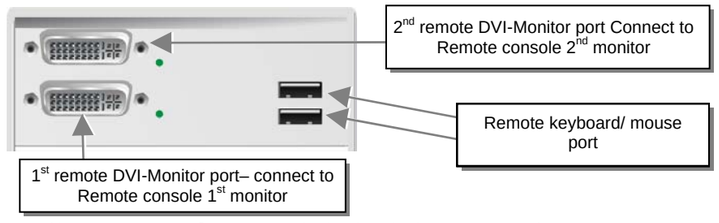
DVXi/ET KVM-Extender Type K461-1U Local Unit



DVXi/ET KVM-Extender Type K461-1U Remote Unit


Connect to CPU: 2nd DVI-Graphic card
2nd local DVI-Monitor port Connect to Local console 2nd monitor
Connect to CPU: USB
Connect to CPU: 1st DVI-Graphic card
local 1st DVI-Monitor port Connect to Local console 1st monitor

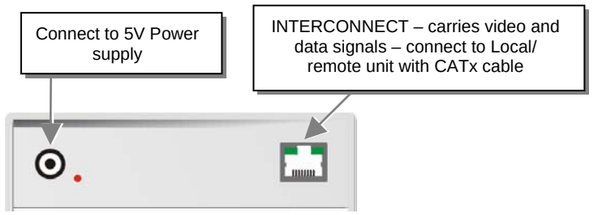
DVXi/ET KVM-Extender Type K461-2U / K461-2U Local Unit


2nd remote DVI-Monitor port Connect to Remote console 2nd monitor
Remote keyboard/ mouse port
1st remote DVI-Monitor port– connect to Remote console 1st monitor

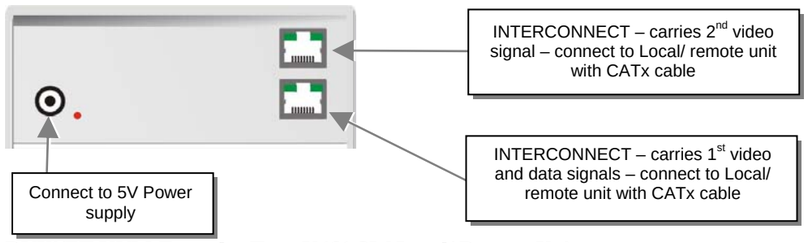
DVXi/ET KVM-Extender Type K461-2U / K461-2U Remote Unit

manual : http://www.ihse.de/pdf/b461-xc_e.pdf

DVXI/ET-XC DVI- KVM-EXTENDER
DVXI/ET-XC DVI- KVM-EXTENDER



DVXi/ET KVM-Extender Type K461-1W Local/ Remote Unit

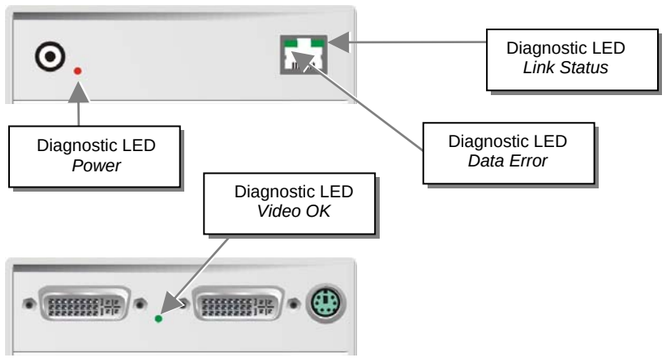

INTERCONNECT – carries 2nd video signal – connect to Local/ remote unit with CATx cable
INTERCONNECT – carries 1st video and data signals – connect to Local/ remote unit with CATx cable
Connect to 5V Power supply

DVXi/ET KVM-Extender Type K461-2W Local/ Remote Unit

3.1 Diagnostic LEDs

Each DVXi/ET KVM-Extender is fitted with four indicator LEDs: *Power*, *Video OK*, *Data Error*, *Link Status*: The *Power* LEDs are next to the Power socket.

The location of the LEDs is shown below:



Diagnostic - LEDs at DVXi/ET - Extender

LED	*Appearance*	*Diagnostics*
Power LED (Red LED)	Off On	Device not ready Device ready
Video Okay (Green LED)	Off On	No or invalid video signal detected Device ready
Link Status (Green LED)	blinking On	No CAT5 connection Device ready
Data Error (Green LED)	Off blinking / On	Device ready Errors through data transmission over CAT5 Cable (Cable too long, too high attenuation or too much EMI interferences)

4 Audio/serial option

No setting up or user adjustments are required. Please note that on the dual access model, the serial link is always active Please bear in mind that the Remote Unit's serial port is wired as DTE (i.e. the same as that on a PC). To connect a serial printer (or other DTE rather than DCE device) to the Remote Unit, you will need a Null-Modem (crossover) cable between the Remote Unit and the printer. A serial Touchscreen may be plugged directly into the Remote Unit.

5 Troubleshooting

If there is a problem with the devices, it's frequently the problem, that the graphic card does not provide a picture at all or only one in an undesired resolution. This mainly occurs from the fact, that the graphic card wrongly processes the DDC information provided in our internal table. You may solve this by sending the DDC information of the locally attached monitor to the graphic card (if available) or to download the DDC information from the remotely attached monitor into the internal DDC table of the Local Unit. The way how to do this is described below.

Other troubles are described in the manual.

5.1 DDC

You can select, whether the DDC is taken from internal DDC table or from local monitor or the DDC information could be downloaded from remote monitor and stored into internal table.

	DDC	JP1	JP2
1	***Loading the DDC Information from the Remote Monitor into the internal DDC Table (see also below) (default)***		
2	***From internal Table***		
3	***From local Monitor***		
4	***Reset DDC Table to factory values***		

5.2 Loading the DDC Information from the Remote Monitor into the internal DDC Table

To load the DDC Information from the Remote Monitor into the internal DDC Table, please proceed the following steps:

- Power up the CPU, the Local Unit, the Remote (cables to the CPU connected) and the Monitor
- Pull the Monitor Cable(s) from the Remote Unit (Dualhead devices: BOTH Monitors!)
- Switch ON the Monitor(s) (if switched OFF, Dualhead devices: BOTH Monitors!)
- Plug the Video-Cable of the Remote Monitor(s) into the remote unit (Remote and Local Unit powered! - Dualhead devices: BOTH Monitors!)
- The DDC Information of the Remote Monitor(s) is read automatically, transferred to the Local Unit and stored into the DDC-EPROM
- After a successful programming of the DDC EPROM, the ‚Video-OK' LED at the Local Unit is blinking rapidly for approx. 1 second
- Done

DVXi/ET-xC DVI-KVM-Extender

Type: K461-1W K461-2W K461-1U K461-2U K461-SA K461-DA K461-SU K461-DU

(Quick Setup)

manual : http://www.ihse.de/pdf/b461-xc_e.pdf
manual : http://www.ihse.de/pdf/b461-xc_e.pdf